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10/682,429	10/10/2003	Hee-Chul Han	Q76934	2133

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SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER	
HARRISON, CHANTE E	
ART UNIT	PAPER NUMBER
2677	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	**Application No.** 10/682,429	**Applicant(s)** HAN, HEE-CHUL
	Examiner Chante Harrison	**Art Unit** 2677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 27 April 2005.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-22 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-22 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 02/25/05
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications: Amendment, filed on 4/27/05.

This action is made FINAL.

2. Claims 1-22 are pending in the case. Claims 1, 7, 14, 21 and 22 are independent claims and have been amended.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1- 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe, US 5,519,412, 5/1996 and further in view of Masayuki Yoshida, US 5,852,680, 12/1998.

As per independent claim 1, Watanabe discloses (a) receiving font data for a character, and setting a degree of font transformation (col. 2, ll. 34-36, 47-50); and (b) transforming the font for the character by moving a set of transforming feature points of a plurality of feature points comprising the font data for the character, according to the set degree of font transformation (col. 5, ll. 30-36; Fig. 3A), and outputting a result of the font trans formation (Fig. 6B "S23"), thereby transforming a shape of the character (abstract; col. 2, ll. 8-16).

Watanabe fails to specifically disclose moving feature points of the font data downward, upward, to the left, or to the right.

Watanabe teaches adjusting the x and y coordinates of the feature points of the font data in accordance with an input designation to change the size of or rotate the font data.

Watanabe also fails to teach moving the set of transforming feature points moves the transforming feature points from their usual positions in the character, which Yoshida teaches, e.g. offsetting the character coordinates to transform the shape by thickening the character (abstract; Fig. 5, 10A, 11 & 12).

It would have been obvious to one of skill in the art to incorporate moving feature points of the font data downward, upward, to the left, or to the right with the disclosure of Watanabe because by adjusting the x and y coordinates of the font data by size change or rotation, the coordinates of the feature points representing font data are moved downward, upward, to the left, or to the right. Additionally, it would have been obvious to one of skill in the art to include Yoshida's transformation of feature points to offset the usual positions of the points in the character with the character generating method of Watanabe because transforming a characters shape by altering the thickness involves adjusting the points forming the character, such that the points are adjusted inward and/or outward from the current character outline to effect a thickening or narrowing of the character, which results in a character of an altered shape.

As per dependent claims 2 and 16, Watanabe discloses wherein the font is expressed using command codes at the plurality of feature points (Fig. 2) and implementation functions forming at least one of a straight line and a curve connecting the plurality of feature points (Fig. 3A; col. 5, ll. 1-14), and moving the set of transforming feature points of the plurality of feature points according to the set degree of font transformation (col. 5, ll. 30-36).

As per dependent claims 3 and 10, Watanabe discloses the curve is a Bezier curve (col. 6, ll. 35-40).

As per dependent claims 4 and 11, Watanabe discloses the font is a vector font (col. 4, ll. 30-35).

As per dependent claims 5, 12 and 19, Watanabe discloses the degree of font transformation is set to a predetermined size of a font size of the font (col. 3, l. 53-57). Watanabe fails to specifically disclose setting a percentage of a font size.

Watanabe teaches designating a size of the character pattern such that the font data is variably magnified (col. 5, ll. 32-36).

It would have been obvious to one of skill in the art to incorporate setting a percentage of a font size with the disclosure of Watanabe because changing the size of font data by variably magnifying the font data designates a scale factor to modify the font data, where the amount in which the font is scaled is representative of a percentage.

As per dependent claims 6, 13 and 20, Yoshida discloses moving a first feature point of the set of transforming feature points of the plurality of feature point by a small amount of movement when a second feature point of the set of transforming feature points adjacent to the first feature point has a vector corresponding to the same quadrant as the vector of the first feature point (i.e. character points on the same side of the character or in the same general area of the character are modified similarly) (Fig. 15 "a & c" repositioned to "A & C"), and in other cases, moving the first feature point by a large amount of movement (Fig. 15 "a & b" repositioned to "A & B"), which Watanabe fails to specifically disclose.

Watanabe teaches expressing character points by relative distances from coordinate points (col. 4, ll. 50-52), such that modification of the character points in the x and y directions result in the enlargement or thickening of the character line segments but maintain symmetry (col. 6, ll. 40-49).

It would have been obvious to one of skill in the art to incorporate Yoshida's disclosure of modifying character feature points having vectors corresponding to the same quadrant are transformed by a small amount of movement and in the case of the points not corresponding to the same quadrant transforming the first point by a large amount of movement with the disclosure of Watanabe because moving closely positioned points by a small amount and moving points in differing portions of a character by a larger amount allows the symmetry of the character to be maintained as points along the character are transformed.

As per independent claim 7, Watanabe discloses (a) deciding whether to transform an instances of a character in a text by a degree of font transformation or to transform an instance of the plurality of instances of the character by a degree of font transformation different from other instances of the plurality of Instances (i.e. performing a check to see if there is an instruction to apply a size change and applying the size change) (col. 5, ll. 30-36); and (b) setting the degree of font transformation for each instance of the plurality of instances of the character, according to the decision (i.e. an input designating a size change is received by the system; and font data is transformed in accordance with the determination that a size change is needed based on a step to check for a size change instruction) (col. 3, ll. 53-57; col. 5, ll. 30-36), and (c) according to the set degree of font transformation, transforming the font of the character by moving a plurality of feature points forming the character(col. 5, ll. 30-36; Fig. 3A), and outputting a result of the transformation (Fig. 6B "S23"), thereby transforming a shape of the character (abstract; col. 2, ll. 8-16).

Watanabe fails to specifically disclose transforming a plurality of instances of a character by an identical degree of transformation and moving feature points of the font data downward, upward, to the left, or to the right.

Watanabe teaches an apparatus for generating a character pattern by changing the size of the feature points through coordinate transformation (col. 3, ll. 45-57), where the method can be applied in a system having a plurality of character generating apparatuses (col. 3, ll. 40-45).

Watanabe also fails to teach moving the set of transforming feature points moves the transforming feature points from their usual positions in the character, which Yoshida teaches, e.g. offsetting the character coordinates to transform the shape by thickening the character (abstract; Fig. 5, 10A, 11 & 12).

It would have been obvious to one of skill in the art to incorporate transforming a plurality of instances of a character by an identical degree of transformation with the disclosure of Watanabe because by inputting a designation of size change of font data to a system comprising a plurality of character generating apparatuses that determine and apply the size change designation results in a transformation of feature points of the font data for a plurality of characters. Additionally, it would have been obvious to one of skill in the art to include Yoshida's transformation of feature points to offset the usual positions of the points in the character with the character generating method of Watanabe because transforming a characters shape by altering the thickness involves adjusting the points forming the character, such that the points are adjusted inward and/or outward from the current character outline to effect a thickening or narrowing of the character, which results in a character of an altered shape.

The rationale as applied in the rejection of claim 1 applies herein.

As per dependent claim 8, Yoshida discloses (b) further comprising, if, based on user input, the decision is made to transform the instance of the plurality of instances of the character by a degree of font transformation different from other instances of the plurality of instances of the character setting the degree of font transformation for each instance of the plurality of instances of the character (i.e. input of a character style and a weight used to modify the character feature points according to user preference) (col. 11-12, ll. 43-15), and in other cases, fixing the degree of font transformation to a predetermined degree (col. 12, ll. 16-25), which Watanabe fails to specifically disclose.

Watanabe teaches in a system having a plurality of character generating apparatuses maintaining font data representing different character codes (col. 4, ll. 15-22), where character codes determine the character pattern to be generated; and a determination is made as to whether or not is input is provided to generate a character pattern of a desired size and style (col. 3, ll. 55-60; col. 5, ll. 30-36).

It would have been obvious to one of skill in the art to incorporate Yohsida's disclosure of transforming a plurality of characters differently if there is user designation of the amount to transform characters, and otherwise using a predetermined degree of transformation with the disclosure of Watanabe because designating the modification of the size and style of a character in accordance with a character code, where the modification data is input by a user, allows for each character pattern that is generated by a plurality of character pattern apparatuses of a system to be modified in accordance with the user input; and by making a determination as to whether or not a user designation of a character size change was made or not suggests that the generated character pattern will be modified as desired by the user when the user specifies the modification and in other cases the character pattern will not be modified.

As per dependent claim 9, Watanabe discloses the character is expressed using command codes at the plurality of feature points forming the character (Fig. 2) and by implementation functions for forming at least one of a straight line and a curve by connecting the plurality of feature points (Fig. 3A; col. 5, ll. 1-14), and moving the set of transforming feature points of the plurality of feature points, according to the degree of font transformation (col. 5, ll. 30-36).

As per independent claim 14, Watanabe discloses a font transformation degree set unit configured to receive input to make a determination to transform all instances of a plurality of instances of a character in a text by a substantially identical degree of font transformation (col. 3, ll. 50-60; col. 6, ll. 40-55) or to transform an instance of the plurality of instances by a degree of font transformation different from the degree of font transformation for other instances of the plurality of instances, and to set, accordingly, the degree of font transformation for the plurality of instances, thereby transforming a shape of the character (abstract; col. 2, ll. 8-16).

Watanabe fails to specifically disclose user input.

Watanabe discloses a system having a processor and an input device as an external apparatus used to provide a designated size to which the character pattern should be transformed (col. 3, ll. 49-60).

Watanabe also fails to teach moving the set of transforming feature points moves the transforming feature points from their usual positions in the character, which Yoshida teaches, e.g. offsetting the character coordinates to transform the shape by thickening the character (abstract; Fig. 5, 10A, 11 & 12).

It would have been obvious to one of skill in the art to incorporate user input with the disclosure of Watanabe because a system having a processor is generally a computer and an external apparatus is commonly used in a computer system to allow input of data by a user. Additionally, it would have been obvious to one of skill in the art to include Yoshida's transformation of feature points to offset the usual positions of the points in the character with the character generating method of Watanabe because transforming a characters shape by altering the thickness involves adjusting the points forming the character, such that the points are adjusted inward and/or outward from the current character outline to effect a thickening or narrowing of the character, which results in a character of an altered shape.

The rationale as applied in the rejection of claims 1 and 7 apply herein.

As per dependent claim 17, the rationale applied in the rejection of claims 2 and 3 apply herein.

As per independent claim 21 the rationale as applied in the rejection of claim 1 applies herein.

As per independent claim 22 the rationale as applied in the rejection of claim 7 applies herein.

Response to Arguments

3. Applicant's arguments, see Applicant's Remarks pp. 10, Para 2, filed 4/27/05, with respect to the rejection(s)of claim(s) 1-5, 7, 9-12, 14-10, 21 and 22 under 35 U.S.C 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Watanabe US 5,519,412 in further view of Yoshida US 5,852,680.

Applicant argues Watanabe does not teach or suggest moving the set of transforming feature points moves the transforming feature points from their usual positions in the character.

In reply, Watanabe teaches using font memory to generate a character by controlling the thickness of line segments and the stroke shapes of the line segments (abstract; col. 2, ll. 8-16). Yoshida teaches offsetting the character coordinates to transform the shape by thickening the character (abstract; Fig. 5, 10A, 11 & 12). It would have been obvious to one of skill in the art to include Yoshida's transformation of feature points to offset the usual positions of the points in the character with the character generating method of Watanabe because transforming a characters shape by altering the thickness involves adjusting the points forming the character, such that the points are adjusted inward and/or outward from the current character outline to effect a thickening or narrowing of the character, which results in a character of an altered shape.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chante Harrison whose telephone number is 571-272-7659. The examiner can normally be reached on Monday, Tuesday and Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on 571-272-3638. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chante Harrison
Examiner
Art Unit 2677

June 30, 2005

CHANH NGUYEN
PRIMARY EXAMINER